



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
-----------------	-------------	----------------------	---------------------	------------------

10/821,026

04/08/2004

Pat Reich

A480.101.101

9227

7590 02/22/2007
DICKE, BILLIG & CZAJA, PLLC
Fifth Street Towers, Suite 2250
100 South Fifth Street
Minneapolis, MN 55402

EXAMINER

TORRES, ALICIA M

ART UNIT

PAPER NUMBER

3671

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
--	-----------	---------------

2 MONTHS

02/22/2007

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.



UNITED STATES PATENT AND TRADEMARK OFFICE

Commissioner for Patents
United States Patent and Trademark Office
P.O. Box 1450
Alexandria, VA 22313-1450
www.uspto.gov

MAILED

FEB 22 2007

GROUP 3600

**BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES**

Application Number: 10/821,026
Filing Date: April 08, 2004
Appellant(s): REICH, PAT

Pat Reich
For Appellant

EXAMINER'S ANSWER

This is in response to the appeal brief filed 2 November 2006 appealing from the Office action mailed 4 January 2006.

(1) Real Party in Interest

A statement identifying by name the real party in interest is contained in the brief.

(2) Related Appeals and Interferences

The examiner is not aware of any related appeals, interferences, or judicial proceedings which will directly affect or be directly affected by or have a bearing on the Board's decision in the pending appeal.

(3) Status of Claims

The statement of the status of claims contained in the brief is correct.

(4) Status of Amendments After Final

The appellant's statement of the status of amendments after final rejection contained in the brief is correct.

(5) Summary of Claimed Subject Matter

The summary of claimed subject matter contained in the brief is correct.

(6) Grounds of Rejection to be Reviewed on Appeal

The appellant's statement of the grounds of rejection to be reviewed on appeal is correct.

(7) Claims Appendix

The copy of the appealed claims contained in the Appendix to the brief is correct.

(8) Evidence Relied Upon

The following is a listing of the evidence (e.g., patents, publications, Official Notice, and admitted prior art) relied upon in the rejection of claims under appeal.

Swartzendruber et al. US Patent No. 6,837,032, 4 January 2005.

(9) Grounds of Rejection

The following ground(s) of rejection are applicable to the appealed claims:

Claims 1-4, 9, 14 and 17 are rejected under 35 U.S.C. 102(e) as being anticipated by Swartzendruber et al. 6,837,032.

Swartzendruber discloses an apparatus for adjusting the height of a mowing deck comprising:

- A foot actuatable lever (28, 31) pivotally connected to the frame (36) of the mower near the operator seating area
- A movable arm (90) having a first end pivotally connected to the lever (28, 31) and a second end operably connected to the deck lift system or rear rotating assembly
- A shoulder (at 90) on the arm (90) between the first and second ends and near the operator seating area, the shoulder connecting to and extending normal to the arm (90)
- A handle rotatable cam wheel (118) rotationally connected to the frame (36) having an outer edge of varying radius wherein the shoulder (at 90) contacts a portion of the outer edge when the lever (28, 31) is in a first position, the shoulder (at 90) is spaced from the outer edge when the lever (28, 31) is in a second position, and wherein the mowing deck height is a function of the radius of the cam (118) outer edge in contact with the shoulder (at 90)
- A means (112, 114) for locking the cam (118) at a selected position.

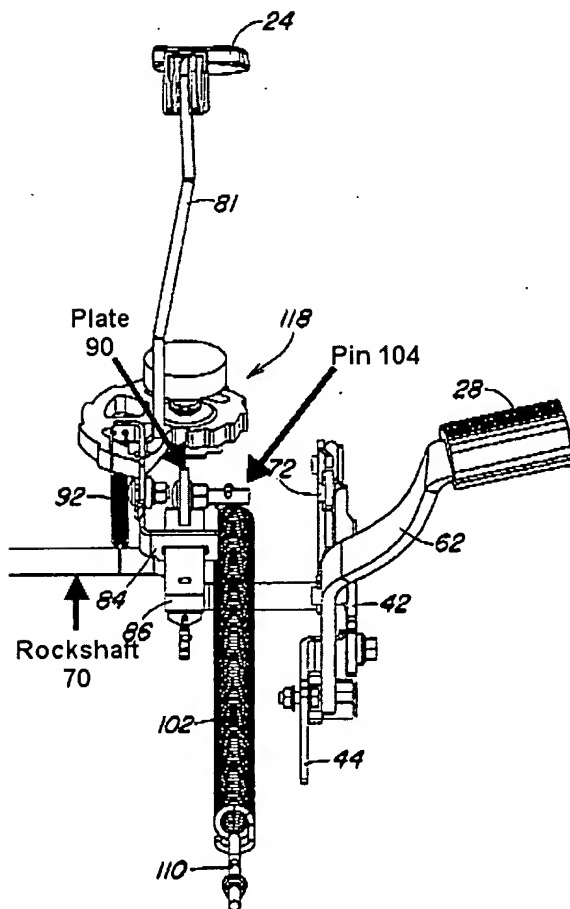
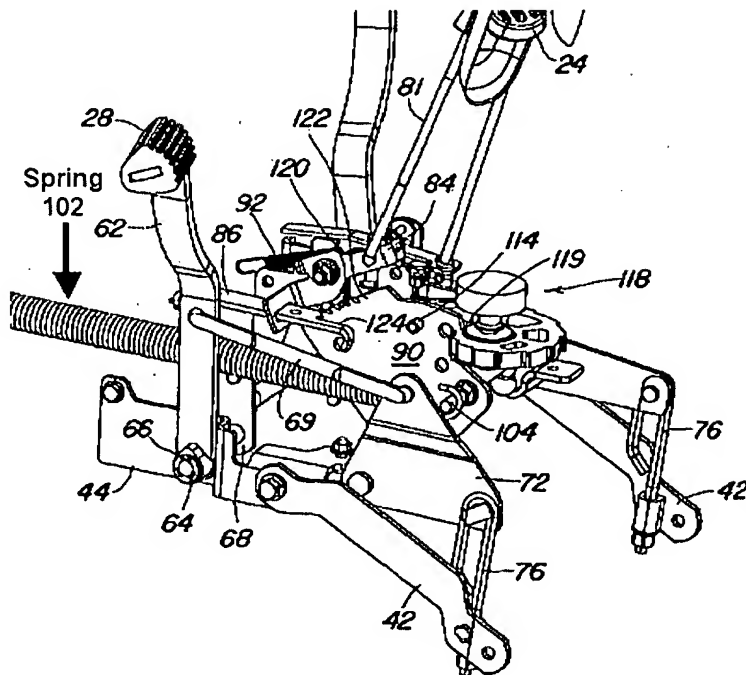
The method of adjusting the deck height as per claims 9-13 are inherent in the apparatus

disclosed by Swartzendruber.

(10) Response to Argument

1. The appellant first argues that Swartzendruber et al.'s plate cannot be considered an arm. Second, the appellant argues that Swartzendruber et al.'s arm lacks a shoulder. Third, the appellant argues that that method of claim 9 is not disclosed by Swartzendruber et al. because the phrase "operably connected" requires that the arm play an active role in the lifting operation.
2. Regarding the appellants first argument, claims 1 and 14 are broader than their arguments. The appellant argues that Swartzendruber's plate (90) cannot be considered an arm since it lacks connection between the arm's (90) first end and the lever (62). However, the examiner would like to point out that the claim is open and without a specific type of connection structure claimed, Swartzendruber et al.'s apparatus is sufficient to read on the claims. As the appellant readily admits, Swartzenbruder's arm (90) pivotally connects with lever (62) through the rockshaft (70) and rod (69), operating with the same purpose as the arm of the invention. Claims 1 and 14 do not contain claim language that would preclude this series-connection between Swarzendruber et al.'s arm (90) and lever (62).

Art Unit: 3671



Art Unit: 3671

3. For purposes of clarity, Swartzendruber et al.'s height adjustment mechanism for a mower cutting deck operates as follows:

The operator applies force to the pedal (28) to fully extend lever (62). The pivoting movement of lever (62) rotates rod (69) which is connected to rockshaft (70, see column 3, lines 47-49). Plate (90) is connected to rockshaft (70, see column 3, lines 58-59), therefore the rotation of rockshaft (70) causes plate (90) to rock forward, away from cam (118, see Figure 4). An operator may rotate the cam (118) either clockwise or counterclockwise to set a desired cut height (see column 5, lines 5-9).

Furthermore, the pivoting movement of the lever (62) also causes the lifting of the mower deck (18), through links 69, 72, 76 and 40 (see column 3, lines 49-52).

4. Second, the appellant argues that Swartzendruber et al.'s arm (90) fails to disclose a shoulder extending normal to the arm and, furthermore, that the edge of Swartzendruber et al.'s arm cannot qualify as a shoulder.

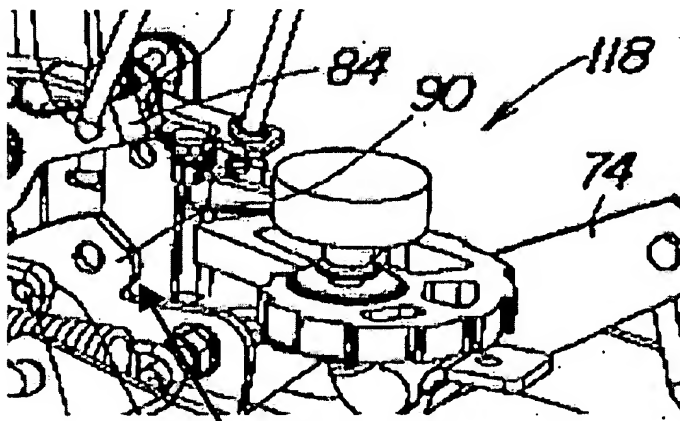
Claim 1 requires "a shoulder between the first end and the second end generally adjacent the operator seating area, wherein the shoulder connects to and extends generally normal to the arm". Claim 14 requires "a shoulder connected to the arm between the first end and the second end, the shoulder extending normal to a direction of displacement of the displaceable arm."

As can be seen in Swartzendruber's Figures 4 and 5 below, the arm (90) has a shoulder connected thereto, located between first and second ends of the arm and extending generally normal to the arm. It is unclear how, as the appellant presents, the edge of Swartzendruber et al.'s arm fails to qualify as a shoulder as defined by the claims. It appears that the appellant may be arguing that Swartzendruber et al.'s arm and shoulder are not two separate parts, however, if

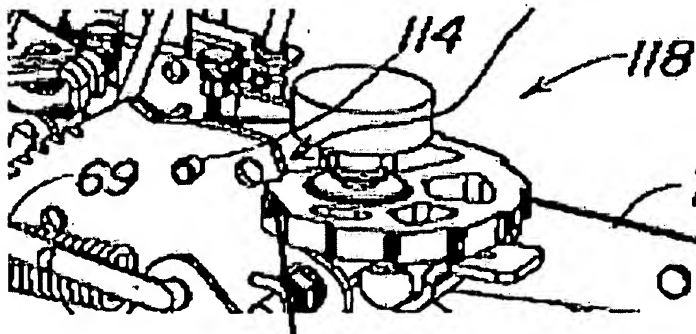
Art Unit: 3671

this is the case, the appellant is arguing more than claimed as this two-piece limitation is not included in the claims and should not be read into them.

Regarding the limitations of claim 14, the displaceable arm (90) moves in a forward and rearward direction when displaced. The shoulder, which extends vertically, therefore extends normal to the direction of displacement.



Shoulder, as
seen in Figure 4



Shoulder engaged
with cam wheel
118, as shown in
Figure 5

5. Third, the appellant argues that the phrase "operably connected" requires that the arm must play an active role in the lifting operation. While the examiner agrees that Swartzendruber

Art Unit: 3671

et al.'s arm does not itself lift the mower deck, the examiner disagrees that Innova/Pure Water, Inc. shows that the arm must lift the mower deck.

Innova/Pure Water Inc. shows that the phrase "operatively connected" requires a linking together of parts to produce the intended or proper effect. However, while the appellant's claim 9 sets forth the parts which are to be linked together (Claim 9, "...providing a displaceable arm operably connected between the lever and the deck lift system..."), the claim fails set forth that the arm must provide the lifting action of the deck. In other words, the claim fails to set forth "the intended or proper effect".

No where in claim 9 is there language stating that the arm's movement lifts the deck. Instead, claim 9 only requires the step of "moving the lever from the first position to a second position, and displacing the arm and locating the shoulder away from the outer edge of the cam, thereby lifting the mowing deck to a raised position" is disclosed. The examiner interprets this step to read that the movement of the lever from the first position to the second position is what causes the mower deck to lift, and also, the movement of the lever is what causes the displacement of the arm and locating of the shoulder away from the cam, as does the device of Swartzendruber et al. The claim language is vague enough so that it is not clear that the displacement of the arm is what causes the deck to lift, as the appellant is arguing.

Since Swartzendruber et al.'s lever (62) causes lifting of the deck (18) and displacement of the arm (90, as explained in paragraph "3" above), Swartzendruber et al.'s device is sufficient to read on the claim.

Art Unit: 3671

(11) Related Proceeding(s) Appendix


No decision rendered by a court or the Board is identified by the examiner in the Related Appeals and Interferences section of this examiner's answer.

For the above reasons, it is believed that the rejections should be sustained.


Respectfully submitted,

Alicia Torres

Conferees:

Thomas B. Will 

Meredith Petravick 


Thomas B. Will
Supervisory Patent Examiner
Group 3600